



DEPARTMENT OF THE ARMY
UNITED STATES ARMY INSTALLATION COMMAND EUROPE
UNITED STATES ARMY GARRISON MANNHEIM
UNIT 29901
APO AE 09086

IMEU-MAN-ZA

JUN 25 2007

MEMORANDUM FOR SEE DISTRIBUTION

SUBJECT: United States Army Garrison Mannheim Policy #34, Energy Guidance

1. References:

- a. Energy Policy Act of 2005.
- b. Executive Order 13423 Strengthening Federal Environmental, Energy, and Transportation Management, 26 January 2007.
- c. AR 11-27, Army Energy Program, 3 February 1997.
- d. DA Interim Policy Guidance, Army Energy Conservation, 27 December 2005.
- e. IMA-Euro Energy Guidance, 3 February 2006.
- f. Memorandum, IMA-PWD-O, Applicability of Energy Policy Act 2005 to Unaccompanied Personnel Housing New Construction, 5 March 2007.
- g. USAG Mannheim Energy Management Plan 2006.
- h. Water Management Plan, 293d Base Support Battalion, 28 September 2004.

2. Purpose: To emphasize energy saving measures which can be controlled by garrison Soldiers, family members, employees, and contractors without decreasing comfort, safety, health and quality of life standards.

3. Background: Department of the Army, IMCOM-Europe and USAG Mannheim guidance support the Energy Policy Act of 2005. The recent EO 13423, Strengthening Federal Environmental, Energy, and Transportation Management emphasizes customer responsibilities within the Energy Management Program and sets goals to be reached by all DOD organizations.

4. Policy: The goals of this policy include reduction of greenhouse gas emissions by 30% by 2010; reduce energy and water consumption by 3% per year; utilize renewable energy (3% of total), use sustainable building practices, and reduce petroleum use 2% per annum.

5. Responsibilities:

a. Installation Coordinators:

(1) Ensure Building Energy Monitors (BEM) are assigned for every building in their area of responsibility.

(2) Report the rank, name, phone number, and the building number of the BEM to USAG Mannheim Energy Manager.

(3) Distribute the enclosed Building Energy Monitor checklist to Building Energy Monitors.

(4) Ensure that all building exterior lights are turned off during the day.

(5) Reduce water consumption in and outside of buildings.

(6) Procure and use Energy Star compliant equipment.

(7) Ensure that no cooling and/or heating devices (space heaters, A/C units) are used unless authorized by the USAG-M DPW and supported by the employee's supervisor and IC.

(8) Forbid idling of vehicles unless needed for safety reasons.

b. Commanders:

(1) Ensure that a Building Energy Monitor has been assigned for all buildings the unit occupies.

(2) Ensure that all Building Energy Monitors in their command attend the Building Energy Monitor training; receive the energy checklists (encls 1-2); and perform assigned duties.

(3) Procure and use energy efficient equipment that meets the ENERGY STAR™ requirements for energy efficiency.

(4) Eliminate off-hour and exterior lighting unless necessary for safety and security reasons (AR 190-11), and turn off lights in offices and common areas during off-duty hours.

(5) Monitor the authorization of refrigerators in work areas based on the number of personnel supported (1 cubic foot of refrigerator space per person).

(6) Monitor the authorization of air conditioner units. Air conditioning units are only authorized if the workspace exceeds the dry bulb temperature of 26.7°C for 350 hours per year.

(7) Monitor the administrative use of vehicles and other energy consuming equipment for unnecessary use. Engines will be turned off when parked unless maintenance operation requires the engine to be running.

(8) Ensure that general purpose office equipment, including computer monitors, are turned off at the end of a working day or when not in use. Servers, storage area network devices and other network infrastructure are not required to be powered off during periods of non-use.

(9) Ensure that contract clauses cover the guidelines of this energy policy. Contractors may also suggest energy conservation opportunities.

(10) Encourage, recognize and reward worthwhile ideas on energy and water conservation.

c. Director of Public Works:

(1) When replacing lighting, use only the standard T-8 light or more energy efficient bulbs. Daylight and motion sensors or timers to automatically shut off lights will be used when cost effective.

(2) During the heating season, DPW will maintain temperatures in occupied general office space at 65 to 70 ° Fahrenheit (plus or minus 2 degrees) during working hours. Set heater to decrease to 55 degrees Fahrenheit during unoccupied hours.

(3) Ensure cooling devices are set to 74°F (plus or minus 2 degrees) during working hours. At night or other times where buildings are unoccupied, temperatures should be 85°F (plus or minus 5 degrees). Exceptions are granted if DOD standards require otherwise (i.e. medical reasons etc).

(4) Maintain hot water supply temperatures as follows:

(a) Automatic dish washing in food services facilities: 140°F.

(b) Final rinse for dishes and utensils in all food service applications: 180°F.

(c) Child Care Centers IAW AR 608-10 for child occupied areas.

(d) Commercial type laundries: 180°F.

(e) Administrative and other facilities: 110°F maximum.

(5) Monitor the power factor in each transformer on a monthly basis.

d. Director of Logistics:

(1) Consider petroleum conservation of 2% per year.

(2) Procure fuel efficient vehicles.

e. Energy Conservation Manager:

(1) Train all Building Energy Monitors.

(2) Provide expertise and support to Building Energy Monitors and others assigned energy and water conservation responsibilities.

(3) Maintain and update all garrison plans and best management practice SOPs pertaining to energy and water conservation.

(4) Visit facilities and conduct quality assurance energy and water conservation inspections as necessary.

(5) Act as the proponent for energy and water conservation projects in the community (i.e. Solar Roofs).

(6) Monitor consumption of energy and water.

(7) Conduct public outreach activities to raise awareness of energy and water conservation throughout the community.

(8) Complete yearly and upward reporting for energy and water savings and usage.

(9) Act as the proponent for energy awards for the community.

(10) Prepare a checklist for drivers which list possible energy saving measure for the use of vehicles.

6. The proponent for this policy is the Directorate of Public Works, Environmental Management Division, DSN 381-8675, FAX 381-8289.

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JEFFREY FLETCHER
LTC, AG
Commanding

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ENERGY MONITORS CHECKLIST

Possible Energy Violations

Corrective Action

Lighting

| | | |
|-----|--|------|
| 1. | Lights left on in unoccupied areas | 2 |
| 2. | Lights in use when daylight is sufficient | 2 |
| 3. | Exterior lights on in daytime | 1 |
| 4. | Light levels too high in corridor, stairwell, etc. | 1 |
| 5. | Dirt on surfaces of lamps and/or light requirements | 1 |
| 6. | Lighting in work areas exceeds requirements for task | 3, 1 |
| 7. | Light bulbs with excessive wattage in use | 1 |
| 8. | Lights over partitions, stacks, etc. | 1 |
| 9. | Excessive exterior illumination | 1 |
| 10. | Walls and/or windows are dirty | 1 |

Electrical Equipment

| | | |
|----|--|---|
| 1. | Equipment left running when not in use | 2 |
| 2. | Personal heaters/coffee pots in use | 2 |
| 3. | Vending machine lights on | 1 |

Water

| | | |
|----|---|---|
| 1. | Leaky faucets | 1 |
| 2. | Excessive flow rates (gallons per minute) | 1 |
| 3. | Pipe insulation missing or damaged | 1 |
| 4. | Temperatures in excess of 110EF | 1 |
| 5. | Steam/water leaks in pipes | 1 |
| 6. | Hot water is not insulated or insulation is damaged | 1 |

Heating and Cooling

| | | |
|-----|---|---|
| 1. | Unconditioned areas not closed off | 2 |
| 2. | Air conditioners running after hours | 2 |
| 3. | Air vents obstructed | 2 |
| 4. | Exterior doors left open (including vestibule doors) | 2 |
| 5. | Windows left open | 1 |
| 6. | Room temperatures too high (greater than 68EF) during occupied periods (winter) | 1 |
| 7. | Room temperatures too low (less than 78EF) during occupied periods (summer) | 1 |
| 8. | Thermostats damaged | 1 |
| 9. | Radiators dirty | 1 |
| 10. | Radiators on in entry ways | 1 |
| 11. | Dirty air filters | 1 |
| 12. | Pipe insulation missing or damaged | 1 |

Refrigeration

| | | |
|----|--|---|
| 1. | Gaskets on doors are not too tight | 1 |
| 2. | Refrigeration/freezer needs defrosting | 2 |

Building

| | | |
|----|---|---|
| 1. | Broken windows/doors | 1 |
| 2. | Misaligned exterior door | 1 |
| 3. | Cracked caulking around windows, doors, and exterior joints | 1 |
| 4. | Defective or missing weatherstripping around windows and/or doors | 2 |

CORRECTIVE ACTION LEGEND

- 1 6 Monitor calls Facilities Maintenance Trouble Call Desk
- 2 6 Monitor takes Corrective Action
- 3 6 Monitor contacts Energy Coordinator

Office Energy Checklist

Always use Compact Fluorescent Lights in desk lamps as opposed to incandescent lights

Switch off all unnecessary lights

Use natural lighting when possible

When working late, use task lighting to directly illuminate work areas

Unplug equipment that drains energy even when not in use (radios, charger, fan, coffemaker, printer)

If possible, turn off your office equipment, computer monitors at the of the work day

Use efficient Energy Star Products

Close or tilt window blinds to block direct sunlight to reduce cooling need during warm months

Photocopy only what you need

Always use the second side of paper, either by printing on both sides or using the blank side as scrap paper

Carpool, bike, or use mass transit when commuting to work

To save gas: drive the speed limit, accelerate and decelerate slower, and make sure tires are pumped up

Use durable coffee mugs instead of disposable cups